

JAN 24 2007

Application No.:10/748,365
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1-35 (canceled)

36. (currently amended) A pleated fluid filter arrangement comprising: at least one layer of fluid filter media pleated into a plurality of longitudinally extending adjacent opposed successive pleat flanks of selected depth and spacing between successive pleat flanks to provide spaced upstream and downstream filter face crests; said successive pleat flanks having a substantially planar surface comprising a single plane with minimal wave formation and being spaced by communicatively facing increments of spaced formed material increments extending in selected lengths centrally oriented between and spaced from said spaced upstream and downstream filter face crests, said increments of spaced formed material increments being adhered to said substantially a planar surface of said adjacent opposed successive pleat flanks.

37. (original) The pleated fluid filter arrangement of Claim 36, said increments of said spaced formed material increments being selected from a suitable fluid pliable adhesive.

38. (original) The pleated fluid filter arrangement of Claim 36, said communicatively facing increments of said spaced formed material increments being of selected thickness so that the distance between adjacent successive pleat flanks and between said spaced upstream and downstream filter face crests is substantially equal.

39. (original) The pleated fluid filter arrangement of Claim 38, said adjacent successive pleat flanks being of a substantially uniform level geometric configuration to minimize wave formation and to minimize fluid pressure drop between said spaced upstream and downstream media faces during filtering operations.

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40. (original) The pleated filter arrangement of Claim 36, said fluid filter media comprising at least one layer of selected scrim material serving as a support layer and a selected fine synthetic filter media material applied to said selected scrim material.

41. (original) The pleated filter arrangement of Claim 40, said scrim material is in the range of approximately forty (40) to two hundred (200) grams per square meter (g/sq. m.) in basic weight with a fiber size in the range of approximately seven (7) to one hundred (100) micrometers with a Gurley stiffness in the range of thirty (30) to five thousand (5000) grams.

42. (original) The pleated filter arrangement of Claim 40, wherein said scrim material includes with a selected hot melt spray of adhesive amorphous material and said filter media material is of a relatively estimated selected weight, fiber, thickness and porosity when applied to said hot melt spray coating.

43. (original) The pleated filter arrangement of Claim 36, said communicatively facing increments being in the form of substantially similar length increment first and second sets with at least one of said sets having a substantially uniform cross-section with at least one certain select increment of said other set being of differing cross-section wherein at least one certain pair of communicatively facing increment is tapered to provide tapered spacing and an overall geometric configuration conducive to a select geometric configuration.

44. (original) The pleated filter arrangement of Claim 36, said communicatively facing formed material increments being in increment first and second sets with at least selected increments of at least one set overlapping with respect to selected pleat crests of said other set.

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45. (original) The pleated filter arrangement of Claim 36, said communicatively facing formed material increments being in formed material increment first and second sets with at least selected formed material increments of one set differing in length from at least one of the lengths of other formed material increments in said sets.

46. (original) The pleated filter arrangement of Claim 36, said communicatively facing formed material increments being in formed material increment first and second sets with at least one of said selected formed material increments of one set differing in cross-sectional breadth from a cross-sectional breadth of at least one of said other formed material increment of said other set.

47. (original) The pleated filter arrangement of Claim 36, said communicatively facing formed material increments being pressure displaced increments.

48. (original) The pleated filter arrangement of Claim 40, wherein said at least one layer of filter media is of synthetic fibrous material.

49. (original) The pleated filter arrangement of Claim 48, wherein at least one layer of filter media is of cellulose material.

50. (original) The pleated filter arrangement of Claim 40, wherein at least one selected scrim layer has been fed to said forming zone as a downstream support layer and a selected fine synthetic filter media material has been applied thereto.

51. (original) The pleated filter arrangement of Claim 50, wherein said downstream support layer includes synthetic material.

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52. (original) The pleated filter arrangement of Claim 50, wherein said downstream support layer is of wet-laid material.

53. (original) The pleated filter arrangement of Claim 50, wherein said downstream support layer is of cellulose material.

54. (original) The pleated filter arrangement of Claim 50, wherein said downstream support layer is of dri-laid material.

55. (original) The pleated filter arrangement of Claim 50, wherein said downstream support layer is of spunbond material.

56. (original) The pleated filter arrangement of Claim 50, wherein said the selected fine synthetic filter media is of meltblown material.

57. (original) The pleated filter arrangement of Claim 56, wherein said the selected fine synthetic filter media being is meltblown material with a selected additive.

58. (original) The pleated filter arrangement of Claim 57, wherein said additive is a fluoro chemical additive to provide water repellency.

59. (Previously Presented) The pleated filter arrangement of Claim 36 wherein said plurality of longitudinally extending adjacent opposed successive pleat flanks have said spaced formed material increments on alternating pleat flanks between said upstream and downstream filter face crests.

60. (Previously Presented) The pleated filter arrangement of Claim 36 wherein said plurality of longitudinally extending adjacent opposed successive pleat flanks have said spaced

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formed material increments on either said pleat flanks between said downstream filter face crests or said pleat flanks between said upstream filter face crests.

61. (Previously Presented) The pleated filter arrangement of Claim 36 wherein a succession of transverse score lines in a fluid filter material form said filter face crests between said longitudinally extending adjacent opposed successive pleat flanks, said communicatively facing increments of spaced formed material increments being disposed in spaced parallel and aligned relation normal to said transverse score lines and parallel to fluid flow.

62. (Currently Amended) A pleated fluid filter arrangement comprising: at least one layer of fluid filter media pleated into a plurality of longitudinally extending adjacent opposed successive pleat flanks of selected depth and spacing between successive pleat flanks to provide spaced upstream and downstream filter face crests; said successive pleat flanks having a substantially singularly planar surface configuration formed in a pleating zone with a back and forth reciprocating motion of a reciprocating mechanism between opposed media faces minimizing wave contour formation and being spaced by communicatively facing increments of spaced formed material increments extending in selected lengths centrally oriented between and spaced from said spaced upstream and downstream filter face crests, said increments of spaced formed material increments being adhered to said substantially a planar surface of said adjacent opposed successive pleat flanks.